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AUTHOR Chamot, Anna Uhl
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ABSTRACT

This paper discusses and advocates the application of structured immersion, or transfer instruction, to the elementary school curriculum in English as a second language (ESL). It is proposed that transfer instruction, bridging bilingual or ESL programs and the mainstream all-English curriculum, helps children transfer the concepts and skills they have learned in their first language to the learning of a second language. This immersion approach links new content instruction to language development activities and establishes effective study skills and learning strategies that aid the learner in listening and reading comprehension. A two-tier approach helps ESL students make the final transition into all-English medium instruction. The first tier focuses on content instruction in the first language which correlates with content of the English-only curriculum. Simultaneously, the ESL curriculum develops classroom language functions needed after mainstreaming. The second tier provides systematic instruction and practice in transferring first language concepts and skills to English, for students who have developed some English proficiency and a store of appropriate concepts in their first language. The model covers a six-year period and all discipline areas. (MSE)

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A Transfer Curriculum For Teaching Content-Based ESL in the Elementary School

Anna Uhl Chamot

INTRODUCTION

Structured immersion has recently been proposed as an alternative to bilingual education and ESL programs. What is it? Opinions vary, but generally, structured immersion is assumed to be a type of second language immersion program on the Canadian model. In their critical review of bilingual education, Baker and de Kanter (1981) define structured immersion as a program in which the second language and content subjects are taught simultaneously from the very beginning level of exposure to the new language. Exactly how this is to be accomplished is not precisely defined, and both ESL and classroom subject teachers may find it somewhat puzzling to figure out how to teach in English to a totally non-English speaking child the life cycle of a butterfly or a math story problem about how much money Linda needs if she wants to play thirty video games at a quarter each.

Most teachers who have worked with limited English proficient (LEP) children would probably agree that some basic proficiency in English needs to be established before children can profit from even simplified subject matter instruction in English.

Mohan (1979) has provided a useful framework for classifying various types of content-centered second language teaching. First, he identifies second language teaching through content instruction alone, exemplified by the Canadian French immersion model, which he questions as a solution for immigrant children, particularly those past the first or second grade level. The second model he describes is dual teaching, or second language instruction combined with content teaching, in which communicative activities are based on subject matter content and linguistically simplified instructional materials and supplementary language exploitation ex-

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Anna Uhl Chamot is Coordinator of Research, Reference, and Referral for the National Clearinghouse for Bilingual Education/InterAmerican Research Associates, Inc.. She is an ESL teacher educator and textbook author.

ercises are utilized. The third model described by Mohan is language teaching aimed for later content teaching, or teaching a second language for specialized purposes. The second and third models, dual teaching and English for specific purposes, can be usefully applied at the elementary school level to assist the LEP child in the transition to the all-English curriculum.

A transfer curriculum which incorporates features of Mohan's second and third models would encompass both teaching of English and content area instruction simultaneously, and teaching of English for specific purposes, which in the context of elementary school education means teaching English for classroom purposes.

This paper proposes a transfer curriculum designed to provide a bridge between the bilingual and/or ESL program and the mainstream classroom by preparing LEP children to transfer concepts they have already acquired in their L1 to their L2. Rather than use the term *structured immersion* or even the European term *language shelter class*, both of which may have pejorative connotations, the simple descriptive term *transfer instruction* is proposed.

THEORETICAL BACKGROUND

Before describing the particulars of transfer instruction, a brief review of the theoretical background underlying the concept of transfer of cognitive knowledge from a first language to a second language may be useful.

The research of Cummins (1979; 1982a) identifies a single underlying language proficiency in bilingual persons. Bilinguals, in his view, do not have a separate store of concepts in each of their languages, but rather a single store of knowledge which can be expressed in either language. According to this interdependence hypothesis, what is learned in the way of concepts is learned once only, and thereafter transferred to the second language whenever adequate proficiency in it has been acquired. Beginning bilinguals have not yet acquired sufficient proficiency in the second language to make such transfer practical, and so for them the most efficient way to acquire knowledge is through the medium of the first language. Concurrently, they need to be acquiring the basic structures, lexicon, and communicative functions of the second language so that eventually they will be able to transfer previously acquired knowledge to the new language.

The duration of this process of initial second language acquisition that is prerequisite to the ability to begin learning through the medium of the second language is the subject of debate not only in the United States but also in other countries with bilingual populations. Research in Canada (Cummins, 1982b) indicates that the process is much longer than many educators would like to assume: about two years for most children to develop social conversational fluency in the second language, and from five to seven years for them to develop the academic language skills that they need in order to succeed in content area subjects. In fact, this may be a conservative estimate. In a current study, Fillmore (1982a) has found that up to 25% of LEP children have acquired very little English after three years of exposure to various types of English instruction in school, and are in need of a significantly longer period of special instruction to prepare them to function effectively in the all-English classroom.

The two types of language proficiency described by Cummins (1982b) as embedded, face-to-face proficiency versus context-reduced academic proficiency and the fact that the second type takes longer to develop have been used by bilingual

educators as a reason to prolong language support services for LEP children, but others have rejected the Cummins analysis and termed it a language deficit model (Edelsky et al., 1983). An empirical investigation of the issue has been undertaken by Fillmore (1982b) in a longitudinal study which has analyzed both the oral and the written language of elementary classrooms to determine what differences exist, in fact, between the language of the classroom and that of social interaction. The findings are of critical importance to those concerned with the education of LEP children. First, there are indeed differences in the type of language used for social purposes and the sort of language required for academic study. Second, both kinds are needed in the elementary school classroom if children are to participate and interact effectively in a learning environment.

How do children acquire both kinds of language proficiency? Krashen (1980) has reduced this problem to an attractive and simple directive: learners will acquire the second language if only they can receive comprehensible input in it. Presumably, this comprehensible input needs to be available both for social interactive and cognitive academic language skills.

The problem of the teacher then becomes how to provide comprehensible input in ESL and in content area subjects for the LEP child. Following are some practical suggestions on how a teacher might go about this task.

CURRICULUM GUIDELINES

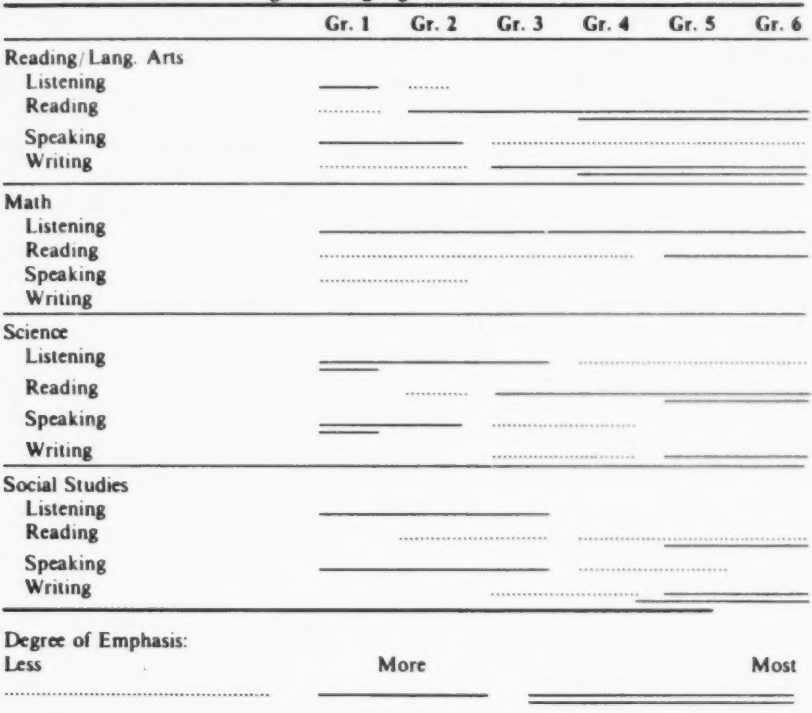
The ESL curriculum needs to be carefully planned so that children learn the functional English that will provide them with needed tools in learning academic language. At the beginning stages of English acquisition, children need to have learned or be learning basic content concepts in the first language so that they will eventually have a body of knowledge to transfer to English.

Then, children need to acquire the specific language functions that they will need in order to participate successfully in the all-English classroom. These are tied directly to the requirements of each subject area (Chamot, 1983b). For instance, in math, children need to be able to use the language functions required for receiving factual information from the teacher's explanations, for comprehending the language of story problems, and for writing numerically. Most speaking functions in the math class involve requesting clarification, expressing comprehension, and explaining a process. Contrast this with the language functions required for successful participation in the all-English language arts class in the elementary grades. Here children must not only be able to use all four language skills in an academically effective manner, but they must also develop a metalinguistic awareness as they begin to deal with such language content as grammar, rhetoric, and style. It is no wonder that LEP children find they can cope with math in English long before they can do so beyond the mechanical level with any of the language arts.

All of these factors need to be taken into account in planning an ESL curriculum. Teaching children to understand and speak in a socially communicative fashion and then to decode a little and complete fill-in-the-blank exercises is not enough preparation for using English as a tool for learning subject matter. Children need to acquire experience and expertise in the functional use of language in all areas of the curriculum.

Table 1 (adapted from Chamot, 1983b) is a sample representation of the language skills often emphasized in the different content areas in a typical

Table 1: English Language Skills in Content Areas



elementary school curriculum. The relative amount of instructional time devoted to each of the four language skills in each of the major subject areas is indicated by a blank space for virtually none, a dotted line for more, and a double solid line for the most. Academic oral skills, particularly speaking, tend to be emphasized less and less as children move up through the grades. Formal development of listening comprehension has a place in many first grade language arts curricula, but after that the assumption seems to be that children can listen well enough to understand the teacher's explanations and instructions in all curricular areas. This is frequently a false assumption as far as the LEP child is concerned.

The increasing emphasis on literacy skills in the middle and upper grades as a means of acquiring and expressing knowledge means that LEP children need to develop substantial proficiency in reading and writing not only for their language related subjects, but also for subject areas such as social studies, science, and to a certain extent, math.

Does the ESL teacher then have to teach content subjects? As much as possible, yes. At a minimum, the ESL teacher should be familiar with the all-English curriculum corresponding to the grade level of the students, and teach the language functions in English that the curriculum demands. Once children have achieved a basic proficiency in English, they can begin to learn some content in some subjects to

some degree through the medium of English. How can the ESL specialist be expected to teach content? At any level, through close collaboration with content area teachers. Elementary school ESL teachers have the advantage of less daunting content in the two subjects that many language teachers tend to view with trepidation—math and science.

TRANSFER INSTRUCTION CURRICULUM MODEL

A special curriculum needs to be provided that will develop children's subject matter knowledge through linguistically simplified instructional materials and second language teaching methodology. Perhaps there are children who do not need such a bridging curriculum, and can easily transfer the concepts learned in their first language to English just as soon as they learn the new verbal labels. It may be, though, that many children are in urgent need of specific help to make such a transfer effectively.

A two-tier approach to language support services could help LEP children make the final transition into all-English medium instruction (Chamot, 1983a). The first tier focuses on content instruction in the first language that is correlated with the curriculum of the English-only classroom and ESL instruction that develops the classroom language functions that will be needed after mainstreaming (see Fillmore, 1982b; Chamot, 1983b).

Transfer instruction, the second tier of the model, would provide systematic instruction and practice in transferring L1 concepts and skills to English for LEP children who have developed some basic proficiency in English and a store of appropriate concepts in their first language. In less linguistically demanding subjects, transfer instruction could begin much sooner than in the more linguistically complex areas.

Table 2 outlines a model (based on Chamot, 1983a) for such a two-tier curriculum, that provides special support during particular time periods for the transfer of L1 concepts to English. The year of participation in the program is listed across the top. For entering first graders, year 1 would correspond to first grade, but for the older child, year 1 would correspond to the grade level in the home language. Because in the United States most bilingual programs end after three years (and

Table 2: Transfer Instruction Curriculum Model

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Reading and Language Arts	L1 Support → | ESL Instruction → | Transfer Instruction → | L2 Only					
Math	L1 Support → | Trans. Instr. → | L2 Only →					
Science	L1 Support → | Trans. Instr. → | L2 Only →					
Social Studies	L1 Support → | Trans Instr. → | L2 Only →					
Art, Music, Phys. Ed.	L1 → | Trans. → | L2 Only →					

many even sooner), the model indicates that year 3 signals the last year of L1 support. Obviously, this configuration would vary depending on local programs.

Oral English, grammar, reading, literature, spelling, handwriting, and composition are included under the category Reading/Language Arts. A long period of both ESL and transfer instruction is probably necessary in these areas in which language is the actual content, as well as the medium of instruction, for each subject.

In math, on the other hand, a shorter period of transfer instruction is indicated because less verbal language is involved. But in science a longer period of transfer instruction would probably be necessary because of the reading comprehension requirements of elementary science textbooks. An even longer period of transfer instruction for social studies can be expected. The middle grades social studies curriculum requires a high level of literacy, as children must acquire information through reading, and develop study skills such as research and report writing. In addition, the values system implicit in the second culture will most likely be reflected in the social studies instructional materials, and may require additional explanation and description for the minority culture child.

Transfer instruction is needed for a relatively short period of time in the highly contextualized curriculum areas of art, music, and physical education.

What should the language of instruction be during transfer instruction? The advice of Baker and de Kanter (1981) may be helpful: instruction should be in English by a teacher who understands the children's first language, and children should not be prohibited from using the first language in classroom interaction. An extension of this proposal is that children should be allowed to express their comprehension of material presented in English through the medium of their first language. Children's reading comprehension, for instance, is likely, in the middle and upper grades, to be in advance of their productive ability to answer questions oraliy or in writing; a true measure of their actual comprehension may be available only by tapping their productive abilities in their first language.

SOME APPLICATIONS OF TRANSFER INSTRUCTION

By the middle grades, LEP children need to be able to use their English language proficiency in context-reduced tasks in which they must acquire information in the content areas through listening and reading comprehension. Teachers can help by teaching study skills and learning strategies for listening and reading, and by simplifying instructional materials so that their content is accessible to LEP children. Following are some specific suggestions for teachers.

Teach children how to deal with unknown words in a text by adopting a conscious strategy. For instance, if the word is not essential to understanding the meaning of the paragraph or sentence, it can safely be ignored. If a partial or general meaning can be gleaned from the context and suffices to comprehend the information being transmitted, guessing at the meaning of the new word by using context clues is a useful strategy. If, on the other hand, the meaning of the new word is absolutely essential to understanding the point of the passage, then recourse to a dictionary is advisable. Children need to be given practice in making decisions about which strategies to use. Cloze exercises have been found useful in teaching students how to deal with unfamiliar materials they are reading (Honeyfield, 1977).

Teach prediction skills by omitting the end of a story and asking children to tell or write the probable ending, or by using a modified cloze procedure with an

expository passage in which a whole sentence is omitted and children have to guess the type of information it contains.

Use advance organizers to help students relate what they already know to the new material they will listen to or read. A preview of the content to be learned can focus attention and prepare students for the details to follow. Questions provided before listening or reading help students identify important information when it is presented. Essential new vocabulary can be taught before it is encountered in an oral or written text. In order to make learning more effective, vocabulary should be presented in semantic categories that help set up conceptual frameworks of the material to be studied (Dupuis and Snyder, 1983). Discussion of background concepts already known by students can help set the stage for learning new related information (Wilson, 1983).

Use visual aids and non-verbal communication to aid comprehension of concepts, and be willing to accept non-verbal responses that indicate children have comprehended the information presented. For example, they can make sketches, diagrams, charts, maps, timelines, equations, flow charts, and tables to show that they have understood the material (Mohan, 1979).

Write outlines, major points, and vocabulary on the board so that students can refer to them as they listen to the presentation of a lesson or read a chapter. Difficult-to-understand key sentences can be re-written on the board with each phrase or major concept in the sentence written on a separate line; this allows students to process the information one thought at a time, rather than trying to take in a complicated sentence all at once (Sutman, Allen, and Shoemaker, 1982).

Teach self-diagnosis of comprehension difficulties by having children ask themselves what it is they do not understand: a single word, a sentence, or the main idea of a paragraph (Wilson, 1983). Too often children give up in frustration at the first comprehension difficulty, rather than evaluate the degree of difficulty and initiate a strategy to overcome it.

Allow for cooperative learning strategies, such as having a group of students pool information they have acquired through listening, or answer reading comprehension questions after discussing in small groups the material read individually. When a cooperative learning atmosphere has been established, children can feel free to correct and help each other, rather than compete with each other.

Notetaking skills need to be taught in the upper elementary school, as they will become increasingly necessary in high school where so much information is transmitted through lectures and lengthy reading assignments. Notes should be written in the student's own words (even if spelling and grammar are less than perfect) rather than verbatim. When students reformulate the information in their own words, they demonstrate their understanding of the concept communicated. Performance objectives should to be explained to students before they begin taking notes on oral or written material, for they need to know in advance if they will be required to recall only the main idea or a series of important facts. Students can be provided with an outline with main headings or, depending on the type of information to be acquired, a matrix with empty cells to be filled in as they listen or read. Some types of information can be best recalled if notes are taken as a visual representation such as a flow chart, sketch, or diagram.

Study skills and learning strategies operate on instructional materials, whether oral or written, that are presented to students. For the LEP student, such materials

should present the same content as those for the all-English curriculum, but they should be linguistically simplified to make them more easily accessible. Unfortunately, the language of elementary school textbooks can be unnecessarily complex linguistically, causing serious comprehension difficulties for LEP children.

Traditionally, simplification of text has been accomplished by reducing the vocabulary load and limiting the complexity of grammatical structures. This approach may be too simplistic, however. Honeyfield (1977) criticizes such traditional text simplification because it often affects communication adversely by reducing the number of information-bearing words and eliminating the cohesion and readability provided by the original syntax and communicative structure. He suggests that simplification should be addressed directly to the content, rather than the linguistic form. That is, the content of a reading passage should be rewritten as a whole, not sentence by sentence, in order to provide comprehensible input for the LEP student. What this implies for content relating to social studies, for instance, is that an outline of major concepts and supporting examples or explanations needs to be developed first, and then the written explanation of these main points needs to be prepared in a simple English of high-frequency words and straightforwardly structured sentences. Elaborations involving multiply embedded sentences, passive constructions, and unknown vocabulary should be avoided wherever possible.

Of course it is asking a lot of teachers to go through textbooks for each subject and simplify them for transfer instruction to LEP children. What is needed is a publisher willing to produce instructional materials containing the essential content of different subject areas rewritten so as to provide comprehensible input for limited English proficient students.

CONCLUSION

This paper has dealt with various aspects of the practical application to the ESL elementary school curriculum of structured immersion, which, it is proposed, should more accurately be termed transfer instruction. Transfer instruction is seen as a bridge between bilingual education or ESL programs and the mainstream all-English curriculum. In transfer instruction children would be helped to transfer the concepts they have already learned in their first language to English, they would receive new content instruction linked with English language development activities, and they would establish effective study skills and learning strategies to aid their listening and reading comprehension.

REFERENCES

Baker, Keith A., and Adriana A. de Kanter. 1981. *Effectiveness of bilingual education: a review of the literature*. Office of Planning, Budget, and Evaluation. Washington, DC: U. S. Department of Education.

Chamot, Anna Uhl. 1983a. *Planning a curriculum for transferring skills from L1 to L2: Focus No. 13*. Rosslyn, VA: National Clearinghouse for Bilingual Education.

——— 1983b. Towards a functional ESL curriculum in the elementary school. *TESOL Quarterly 17*, 3:

Cummins, James. 1979. Linguistic interdependence and the educational development of bilingual children. *Review of Educational Research 49*: 221-251.

——— 1982a. *Interdependence and bicultural ambivalence: regarding the pedagogical*

rationale for bilingual education. Rosslyn, VA: National Clearinghouse for Bilingual Education.

——— 1982b. *Tests, achievement, and bilingual students: Focus No. 9.* Rosslyn, VA: National Clearinghouse for Bilingual Education.

Dupuis, Mary M. and Sandra L. Snyder, 1983. Developing concepts through vocabulary: a strategy for reading specialists to use with content teachers. *Journal of Reading 26*, 4: 297-305.

Edelsky, Carole, et al. 1983. Semilingualism and language deficit. *Applied Linguistics 4*, 1: 1-22.

Fillmore, Lily Wong. 1982a. Variation in bilingual instructional practice and second language learning. Paper presented at Principal Investigators Seminar on Part C Research Agenda, Leesburg, VA, December 2, 1982.

——— 1982b. Language minority students and school participation: what kind of English is needed? *Journal of Education of Boston University*, 164, 2:143-156.

Honeyfield, John. 1977. Simplification. *TESOL Quarterly 11*, 4:431-440.

Krashen, Stephen D. 1980. The input hypothesis. *Current issues in bilingual education.* Georgetown University Round Table on Languages and Linguistics 1980. James E. Alatis (Ed.). Washington, DC: Georgetown University Press, pp. 168-180.

Mohan, Bernard A. 1979. Relating language teaching and content teaching. *TESOL Quarterly 13*, 2:171-182.

Sutman, Francis X., Virginia French Allen, and Francis Shoemaker. 1982. Limited English and the learning of science: a guide to collaboration for science teachers and English teachers. Mimeographed.

Wilson, Cathy Roller. 1983. Teaching reading comprehension by connecting the known to the new. *The Reading Teacher* 36, 4:382-390.